

IN THE CLAIMS

Please **amend** claims 1, 8, 16, and 18-20 and **cancel** claim 5 without prejudice as shown in the Summary of the Claims, *infra*.

Amendments are made without the intention of surrendering equivalents to the subject matter.

SUMMARY OF THE CLAIMS

Claim 1 (currently amended)

1. (Amended) An image processing device for comparing a sum of a total density difference of two kinds of sub mask pixel groups in a main scanning direction and a total density difference of two kinds of sub mask pixel groups in a sub scanning direction with a threshold value,
~~computing a total density for at least four kinds of the sub-pixel groups being provided in a main pixel group, which is constituted by a plurality of pixels including a target pixel, and for making area determination based on the total densities, upon area~~
determination of the if said target pixel is an edge area or not, upon area
determination of said target pixel in an inputted image data.

Claims 2-4 (original)

2. The image processing device as defined in claim 1, wherein said area determination determines if said target pixel is an edge area or not.
3. The image processing device as defined in claim 1, wherein normalization is performed with a coefficient when said sub pixel groups are different in size from one another.
4. The image processing device as defined in claim 1, wherein said sub pixel groups are disposed on or around an end of said main pixel group.

Claim 5 (canceled)

Claims 6 and 7 (original)

6. The image processing device as defined in claim 5, wherein in said main pixel group, a complication degree is computed by summing density differences between adjacent pixels or pixels disposed with a fixed interval in a main scanning direction,

and a complication degree is computed by summing density differences between adjacent pixels or pixels disposed with a fixed interval in a sub scanning direction, and area determination is further made based on the computing result.

7. The image processing device as defined in claim 6, wherein after determination is made based on the value S if the target pixel is an edge area or not, a difference is computed between the complication degree in a main scanning direction and the complication degree in a sub scanning direction regarding a non-edge area, and determination is

made again if the target pixel is an edge area or not based on the computing result.

n-e.
Claim 8 (currently amended)

8. (Amended) The image processing device as defined in claim 6, wherein after determination is made based on the value S if the target pixel is an edge area or not, a total of the complication degree in a main scanning direction and the complication degree in a sub scanning direction is computed regarding a non-edge area, and determination is made again if the target pixel is a dot mesh area corresponding to an image area or a non-edge area based on the computing result.

Claims 9-15 (original)

9. The image processing device as defined in claim 6, wherein the complication degree in a main scanning direction is a total of density differences of every other pixel, and the complication degree in a sub scanning direction is a total of density differences of adjacent pixels.

10. The image processing device as defined in claim 1, wherein an average density or a total density of said main pixel group is computed, and determination is made based on the computing result if the target area is an edge area or not.

11. The image processing device as defined in claim 10, wherein upon computing an average density of said main pixel group, a total density is not divided by the number of pixels but by a power of 2 being the closest to the number of pixels.

12. The image processing device as defined in claim 2, wherein when determining if a target pixel is an edge area or not based on a total density of said sub pixel groups, after determination of an edge area is successively made for a predetermined times or with a predetermined frequency, a threshold value for determining if the target pixel is an edge area or not is changed.

12.E.

13. The image processing device as defined in claim 1, wherein upon area determination, a plurality of determining operations are performed in a predetermined order.

14. The image processing device as defined in claim 13, wherein determination is made based on a computing result of an average density or a total density of said main pixel group, before determination based on the value S, determination based on a difference between the complication degrees in a main scanning direction and in a sub scanning direction, and determination based on a total of the complication degrees in a main scanning direction and in a sub scanning direction.

15. The image processing device as defined in claim 13, wherein determination is made in an order of: determination based on a computing result of an average density or a total density of said main pixel group, determination based on the value S, determination based on a difference between the complication degrees in a main scanning direction and in a sub scanning direction, and determination based on a total of the complication degrees in a main scanning direction and in a sub scanning direction.

Claim 16 (currently amended)

16. (Amended) The image processing device as defined in claim 1, wherein area determination is determined by methods ~~all determination methods that~~ are executed in parallel, wherein said methods include:

—determination based on a computing result of an average density or a total density of said main pixel group,

determination based on the value S, determination based on a difference between the complication degrees in a main scanning direction and in a sub scanning direction, and

determination based on a total of the complication degrees in a main scanning direction and in a sub scanning direction.

0-2.
Claim 17 (original)

17. The image processing device as defined in claim 16, wherein said area determination made in said parallel operation uses a truth table.

Claims 18-20 (currently amended)

18. An image processing device as recited in claim 1 further including ~~for changing a coefficient of a filter processing section that filters each area of the image data based on a predetermined filter coefficient based on an area determined in area determination processing of claim 1.~~

19. An image processing device as recited in claim 1 further including ~~a for changing a gamma correcting correction section that performs gamma correction on each area of the image data using a predetermined gamma correction table based on an area determined in area determination processing of claim 1.~~

20. An image processing as recited in claim 1 further including ~~device for changing an error diffusion section that performs error diffusion based on an error diffusion parameter that has been preset for each area of the image data based on an area determined in area determination processing of claim 1.~~